

**IN THE UNITED STATES PATENT AND TRADEMARK OFFICE  
BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES**

<b>IN RE: BOESEN, Peter V.</b>	)	
	)	<b>APPEAL NO. _____</b>
<b>SERIAL NO: 09/558,519</b>	)	
	)	
<b>FOR: POINT OF SERVICE BILLING AND RECORDS SYSTEM</b>	)	
	)	<b>REPLY BRIEF ON APPEAL</b>
<b>FILED: April 26, 2000</b>	)	
	)	
<b>GROUP ART UNIT: 3626</b>	)	
	)	
<b>CONF. NO: 9687</b>	)	

To the Commissioner of Patents and Trademarks  
Mail Code Appeal Brief - Patents  
P. O. Box 1450  
Alexandria, VA 22313-1450

Dear Sirs and Madams:

Please enter the following Reply Brief on Appeal into the record, in response to the  
Examiner's Answer dated May 12, 2009.

=====

**CERTIFICATE OF MAILING/TRANSMISSION**

I hereby certify that this correspondence is, on the date shown below, being:

**EXPRESS MAILING**  
☐ deposited with the United States Postal  
Service with sufficient postage as Express  
mail in an envelope addressed to the  
Commissioner for Patents,  
Mail Stop Appeal Brief – Patents  
P.O. Box 1450, Alexandria, VA 22313-1450  
Express Label No. \_\_\_\_\_

**ELECTRONIC**  
☒ transmitted by electronic to the Patent  
and Trademark Office, using the EFS

Date: \_\_\_\_\_

7/13/09

\_\_\_\_\_  
Jeffrey D. Hasty

## **TABLE OF CONTENTS**

I.	INTRODUCTION.....	1
II.	STATUS OF CLAIMS .....	1
III.	GROUND OF REJECTION TO BE REVIEWED ON APPEAL.....	1
IV.	ARGUMENT .....	2
A.	Claims 84, 88-89, 94, 98-100, 102-103 and 110 are patentably distinguishable from U. S. Patent No. 6,393,404 to Waters et al in view of U. S. Patent No. 5,325,293 to Dorne and U. S. Patent No. 5,823,949 to Goltra. ....	2
1.	Waters et al. is largely deficient. ....	3
2.	Waters et al. teaches away from the claimed invention because Waters et al. selects codes for usage based on optimized billing and not to better document the patient encounter. ....	4
3.	The Examiner failed to properly consider the scope and content of the prior art, as the Examiner failed to properly consider Dorne. ....	6
4.	The Examiner failed to properly consider the scope and content of the prior art, as the Examiner failed to properly consider Goltra. ....	8
5.	None of the cited prior art references teach "documenting the patient encounter by storing the rank ordering of the selection of the plurality of diagnosis codes linked to the selection of the patient procedure code of the procedure performed to thereby provide a record of the procedure performed, a record of each diagnosis supporting the procedure performed, and a user defined ranking of each diagnosis supporting the procedure performed." .....	8
6.	None of the cited prior art alone or in combination teach "receiving a change in ordering of diagnosis codes" or "maintaining a user defined rank ordered relationship between the patient procedure code and the plurality of diagnosis codes based on the patient encounter to thereby provide a detailed record of the patient encounter." as recited in claim 98. ....	9

7. Lavin et al. does not remedy the deficiencies of Waters et al., Dorne and Goltra and thus the Examiner should reverse with respect to claims 85-87. ....	11
B. Claims 92-93, 105 and 108 are patentably distinguishable from U. S. Patent No. 6,393,404 to Waters et al in view of U. S. Patent No. 5,823,949 to Goltra. ....	11
1. The Examiner fails to properly consider the scope and content of the prior art and must be reversed with respect to claims 92-93 because neither Waters et al. nor Goltra alone or in combination teach "linking the plurality of diagnosis codes in a user defined rank order to the patient procedure code such that a defined relationship between the patient procedure code and the plurality of diagnosis codes is maintained to thereby provide a record of the procedure performed, a record of each diagnosis supporting the procedure performed, and a user defined ranking of each diagnosis supporting the procedure performed to provide a record of the patient encounter." .....	11
2. The Examiner fails to properly consider the scope and content of the prior art and must be reversed with respect to claims 105 and 108 because neither Water et al. nor Goltra alone or in combination teach "linking the plurality of diagnosis codes in a user defined rank order to the patient procedure code such that a defined relationship between the patient procedure code and the plurality of diagnosis codes is maintained to thereby provide a record of the procedure performed, a record of each diagnosis supporting the procedure performed, and a user defined ranking of each diagnosis supporting the procedure performed to provide a record of the patient encounter." .....	12
V. CONCLUSION .....	13

## **I. INTRODUCTION**

This is a Reply Brief in response to the Examiner's Answer dated May 12, 2009 pursuant to 37 CFR 41.41(a). Appellants submit the Examiner's answers have failed to remedy the deficiencies with respect to the Final Office Action dated September 17, 2008 and as noted herein and in the Appellants' Appeal Brief. Appellants respectfully request that the rejections to claims 84-89, 92-94, 98-100, 102-103, 105, 108, and 100 be reversed.

## **II. STATUS OF CLAIMS**

Claims 84-89, 92-94, 98-100, 102-103, 105, 108 and 110 are pending. Claims 84-89, 92-94, 98-100, 102-103, 105, 108, and 110 are appealed. Claims 1-83, 90-91, 95-97, 101, 104, 106-107, 109 and 111 have been cancelled.

## **III. GROUNDS OF REJECTION TO BE REVIEWED ON APPEAL**

A. Whether claims 84, 88-89, 94, 98-100, 102-103 and 110 are unpatentable under 35 U.S.C. § 103(a) over U. S. Patent No. 6,393,404 to Waters et al in view of U. S. Patent No. 5,325,293 to Dorne and U. S. Patent No. 5,823,949 to Goltra and whether claims 85-87 are unpatentable under 35 U.S.C. § 103(a) over U. S. Patent No. 6,393,404 to Waters et al in view of U. S. Patent No. 5,325,293 to Dorne and U. S. Patent No. 5,823,949 to Goltra and further in view of U.S. Patent No. 5,772,585 to Lavin et al.

B. Whether claims 92-93, 105 and 108 are unpatentable under 35 U.S.C. § 103(a) over U. S. Patent No. 6,393,404 to Waters et al in view of U. S. Patent No. 5,823,949 to Goltra.

#### IV. ARGUMENT

A. **Claims 84, 88-89, 94, 98-100, 102-103 and 110 are patentably distinguishable from U. S. Patent No. 6,393,404 to Waters et al in view of U. S. Patent No. 5,325,293 to Dorne and U. S. Patent No. 5,823,949 to Goltra.**

The Examiner accuses Appellant of analyzing applied references separately and arguing each of the references individually (citing to *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981) and *In Re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986)), (Examiner's Answer, p. 17). Where the Examiner has made erroneous interpretations of references in support of her rejections, Appellant has identified such errors. Consideration of the differences between the prior art and the claims at issue, is in fact one of the requirements of *Graham v. John Deere Co.*, 383 U.S. 1, 86 S.Ct. 684, 15 L.Ed.2d 545, 148 USPQ 459 (1966).

The Examiner's interpretation of the law fares no better than the Examiner's interpretation of the cited prior art references. Neither *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981) nor *In Re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986) stand for the proposition that Applicant is not entitled to identify the Examiner's errors in interpreting the prior art references.

It is the Examiner that has failed to consider the prior art teachings as a whole. Although, the Examiner's Answer speaks of combining Waters, Dorne, Goltra, and Lavin "based on the logic and sound scientific reasoning of one ordinarily skilled in the art at the time of the invention" (Examiner's Answer, p. 18), the Examiner has failed to set forth convincing evidence of obviousness and instead parses the claim language into a number of disjoint pieces defining claim language inconsistently between references, all in a manner which eviscerates its meaning. Doing so ignores the claim language as well as the invention as a whole.

**1. Waters et al. is largely deficient.**

Waters et al. is generally directed towards a system and method for optimizing diagnosis procedures and reimbursement claims using a structured search space (Abstract). Waters et al. builds a search tree of all possible combinations of the simple procedures and the compound procedures in a list of ordered procedures and then searches the search tree for the lowest total of values associated with the medical procedures in the list of ordered procedures so as to determine the lowest reimbursement value combination (col. 12, lines 49-67).

As the Examiner recognizes, Waters et al. does not disclose "linking the selection of the patient procedure code to the selection of the plurality of diagnosis codes on the first computer" as recited in claim 84 (Examiner's Answer, p. 4) As the Examiner further recognizes, Waters et al. does not disclose "providing a user interface adapted for ranking the plurality of diagnosis codes linked with the patient procedure code in a user defined rank

order after receiving the selection of the plurality of diagnosis codes" as recited in claim 84 (Examiner's Answer, p. 5).

As the Examiner further recognizes, Waters et al. also does not disclose "documenting the patient encounter by storing the rank ordering of the selection of the plurality of diagnosis codes linked to the selection of the patient procedure code of the procedure performed to thereby provide a record of the procedure performed, a record of each diagnosis supporting the procedure performed, and a user defined ranking of each diagnosis supporting the procedure performed" as recited in claim 84 (Examiner's Answer, p. 5).

**2. Waters et al. teaches away from the claimed invention because Waters et al. selects codes for usage based on optimized billing and not to better document the patient encounter.**

The Examiner attempts to refute the fact that Waters teaches away from the claimed invention because of Waters' emphasis on optimized billing by arguing (1) Waters has embodiments not directed towards billing and (2) Applicant discusses billing in Applicant's specification.

The Examiner argues that Waters teaches different embodiments, one of which is optimized billing. Tellingly, the Examiner does not indicate what other embodiments Waters teaches. The Examiner cites to "[t]he present invention relates generally to a system and method to optimize medical diagnosis, procedures and reimbursement claims using a structured search space" (Waters; column 1, lines 6-8) and "[i]n addition, an optimization of the medical procedures prescribed for a particular medical encounter is also needed" (Waters;

column 1, lines 62-64). When Waters discusses "optimization" or "optimizing", Waters refers to a determination of the optimum billing structure (see e.g. col. 5, lines 1-6).

Waters teaching of optimizing the ordering of patient procedures teaches away from the claimed invention, because by doing so Waters teaches that the order of medical diagnosis or procedures is not important to the documentation of the patient encounter. That is directly contrary to Applicant's claimed invention in which the ordering of diagnosis and procedures is important to the documentation of the patient encounter.

The fact that Applicant discusses billing in Applicant's application does not somehow negate Waters teaching away from the claimed invention. Applicant also uses codes in billing. What is different is that Waters teaches that codes are "optimized" for billing purposes, which teaches away from maintaining codes in a particular order specified by the doctor (or other health care provider) which links procedure codes with diagnosis codes and maintains a rank ordering of the diagnosis codes associated with each procedure to document the patient encounter.

In any event, the Examiner does not refute that Waters teaches "optimizing" codes, which is the re-ordering of codes according to an algorithm. This teaches away from maintaining codes in a particular order specified by the doctor (or other health care provider) which links procedure codes with diagnosis codes and maintains a rank ordering of the diagnosis codes associated with each procedure to document the patient encounter. Thus, even if Waters could somehow be interpreted as teaching optimization for some purpose



other than billing, Waters re-ordering of codes according to an optimization algorithm teaches away from the claimed invention.

**3. The Examiner failed to properly consider the scope and content of the prior art, as the Examiner failed to properly consider Dorne.**

Dorne fails to record the same amount of information about the patient encounter as in the claimed invention and Dorne fails to realize the benefit of linking procedure codes with diagnosis codes and maintaining a rank ordering of the diagnosis codes associated with each procedure.

Dorne does not teach the claimed linking. Dorne teaches essentially that once a user selects a set of procedures that the user is given a list of diagnoses associated with the set of procedures from which to select. In Dorne, there is relationship between procedure codes and diagnosis codes which assists in selection of diagnosis codes. Yet this does not meet the limitation of "linking the selection of the patient procedure code to the selection of the plurality of diagnosis codes on the first computer." Note it is not merely a relationship between the procedure codes and diagnosis codes which is being claimed, but rather a linking of the selection of the patient procedure code to the selection of the plurality of diagnosis codes. Thus, it is clear that this link is not formed *a priori*, but rather is a health care provider defined relationship because the link is based on both the selection of the patient procedure code and the selection of the plurality of diagnosis codes.

The Examiner's Answer states "Examiner interprets Dorne's teachings to teach a form of 'linking the selection of the patient procedure code to the selection of the plurality of

diagnosis codes on the first computer.'" (*Emphasis added*). The Examiner's careful choice of words is telling as to the weakness of the Examiner's argument.

The Appellant further specifies in the claim what "form" of linking is being claimed by reciting "wherein the linking of the selection of the patient procedure code and the selection of the at least one diagnosis code provides for maintaining a rank ordered relationship between the patient procedure code and the at least one diagnosis code to thereby provide a detailed record of an encounter." By the Examiner's admission, Dorne does not teach the claimed linking.

The Examiner appears to think the fact that Dorne does not disclose the claimed "form" of linking is not important by noting that Goltra is being relied upon to teach "wherein the linking of the selection of the patient procedure code and the selection of the at least one diagnosis code provides for maintaining a rank ordered relationship between the patient procedure code and the at least one diagnosis code to thereby provide a detailed record of an encounter." (Examiner's Answer, p. 24). Yet, what is meant by the linking limitation is expressed within the claim. Dorne does not disclose the claimed "form" of linking, and thus does not disclose the claimed step.

One of the further problems with the Examiner's analysis is that the Examiner interprets "linking the selection of the patient procedure code to the selection of the plurality of diagnosis codes on the first computer" one way for purposes of applying Dorne, and then ignores this interpretation of "linking" when applying Goltra.

**4. The Examiner failed to properly consider the scope and content of the prior art, as the Examiner failed to properly consider Goltra.**

The Examiner further errors in finding that Goltra teaches "wherein the linking of the selection of the patient procedure code and the selection of the at least one diagnosis code provides for maintaining a rank ordered relationship between the patient procedure code and the at least one diagnosis code to thereby provide a detailed record of an encounter."

The Examiner cites a passage from Goltra, column 4, line 57 to column 5, line 7, remarking that the cited passage teaches "a form of these limitations" (Examiner's Answer, p. 24). Again the Examiner uses the qualifier of a "form" which is tellingly of the weakness of the Examiner's rejection. Goltra does not teach the relevant claimed limitation. It is the selection of the patient procedure code which is linked to the selection of the diagnosis code and a rank ordered relationship between the patient procedure code and diagnosis code that is maintained to provide a detailed record of an encounter. How does Goltra provide a detailed record of an encounter based on its rank ordering? It does not.

**5. None of the cited prior art references teach "documenting the patient encounter by storing the rank ordering of the selection of the plurality of diagnosis codes linked to the selection of the patient procedure code of the procedure performed to thereby provide a record of the procedure performed, a record of each diagnosis supporting the procedure performed, and a user defined ranking of each diagnosis supporting the procedure performed."**

It is further submitted that claim 84 recites "documenting the patient encounter by storing the rank ordering of the selection of the plurality of diagnosis codes linked to the selection of the patient procedure code of the procedure performed to thereby provide a

record of the procedure performed, a record of each diagnosis supporting the procedure performed, and a user defined ranking of each diagnosis supporting the procedure performed." None of the cited prior art references alone or in combination disclose this limitation. Moreover, this is a significant difference from the cited prior art because it provides for code-driven documentation of a patient encounter, providing additional documentation regarding why a health care provider performed a particular procedure and what diagnosis was most important to them in making that decision.

The Examiner relies upon Goltra as teaching this limitation (Examiner's Answer, p. 25; Examiner's Answer, p. 6). The Examiner considers "medical finding" to be the claimed procedure code. There is no support for such an interpretation in Goltra and the Examiner provides no basis for such reasoning. No one of ordinary skill in the art would consider a "medical finding" to be a "patient procedure code." It is not. Thus, the Examiner must be reversed for this reason as well.

For all these reasons, it is respectfully submitted that this rejection to claim 84 must be reversed. As claims 85-89, 94, and 110 depend from claim 84, these rejections should also be reversed.

6. **None of the cited prior art alone or in combination teach "receiving a change in ordering of diagnosis codes" or "maintaining a user defined rank ordered relationship between the patient procedure code and the plurality of diagnosis codes based on the patient encounter to thereby provide a detailed record of the patient encounter" as recited in claim 98.**

In the Examiner's strained interpretation of the language of claim 98, the Examiner interprets Goltra's computerized medical system which accepts medical findings and then

ranks possible diagnoses as meeting the above claim limitation. Again, here the Examiner considers the "medical findings" of Goltra to be "patient procedure code." Clearly, they are not. In Goltra, medical findings are used to produce diagnoses (not diagnosis codes). Thus, the medical findings are provided before a diagnosis is made. Procedures are performed after diagnoses are made. Goltra's "medical findings" can not be "patient procedure codes."

What is particularly troubling with the Examiner's interpretation of what is meant by "patient procedure code" is that claim 98 expressly defines what a patient procedure code is by stating "the patient procedure code representing a patient procedure performed on a patient during a patient encounter." The Examiner can not ignore the expressly defined meaning of a term in the claim.

The Examiner further cites to Goltra "to teach a form of 'receiving a change in ordering of diagnosis codes from a user.'" (*Emphasis added*, Examiner's Answer, p. 26). Again, the Examiner's use of "a form" signals that a strained interpretation of claim language. On page 26 of the Examiner's Answer, the Examiner cites to language which does not support the Examiner's conclusion.

With respect to the limitation of "maintaining a user defined rank ordered relationship between the patient procedure code and the plurality of diagnosis codes based on the patient encounter to thereby provide a detailed record of the patient encounter", the Examiner relies only on Goltra which is deficient for the reasons previously discussed herein. None of the cited prior art references alone or in combination teach such a limitation. Nor is there any convincing evidence that one skilled in the art would consider such a limitation to

be obvious. Therefore, it is respectfully, submitted that this rejection to claim 98 should also be reversed. As claims 99-100 and 102-103 depend from claim 98, it is respectfully submitted that these rejections should also be reversed.

**7. Lavin et al. does not remedy the deficiencies of Waters et al., Dorne and Goltra and thus the Examiner should reverse with respect to claims 85-87.**

Claims 85-87 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Waters et al. Dorne, Goltra, and further in view of U.S. Patent No. 5,772,585 to Lavin et al. Claims 85-87 depend from claim 84 for which the deficiencies of Waters et al. Dorne, and Goltra have already been discussed. Lavin et al. does not remedy these deficiencies. Therefore this rejection to claims 85-87 should also be reversed.

**B. Claims 92-93, 105 and 108 are patentably distinguishable from U. S. Patent No. 6,393,404 to Waters et al in view of U. S. Patent No. 5,823,949 to Goltra.**

**1. The Examiner fails to properly consider the scope and content of the prior art and must be reversed with respect to claims 92-93 because neither Waters et al. nor Goltra alone or in combination teach "linking the plurality of diagnosis codes in a user defined rank order to the patient procedure code such that a defined relationship between the patient procedure code and the plurality of diagnosis codes is maintained to thereby provide a record of the procedure performed, a record of each diagnosis supporting the procedure performed, and a user defined ranking of each diagnosis supporting the procedure performed to provide a record of the patient encounter."**

Claims 92-93, 105, and 108 have been rejected under 35 U.S.C. § 103(a) as being unpatentable over Waters et al. in view of Goltra. Claim 92 recites "linking the plurality of diagnosis codes in a user defined rank order to the patient procedure code such that a defined relationship between the patient procedure code and the plurality of diagnosis codes is

maintained to thereby provide a record of the procedure performed, a record of each diagnosis supporting the procedure performed, and a user defined ranking of each diagnosis supporting the procedure performed to provide a record of the patient encounter." Neither Waters et al. nor Goltra disclose such a limitation. Moreover, this is a significant difference and ignoring it eviscerates that which makes the claim patentable. Therefore, it is respectfully submitted the Examiner must be reversed.

2. **The Examiner fails to properly consider the scope and content of the prior art and must be reversed with respect to claims 105 and 108 because neither Water et al. nor Goltra alone or in combination teach "linking the plurality of diagnosis codes in a user defined rank order to the patient procedure code such that a defined relationship between the patient procedure code and the plurality of diagnosis codes is maintained to thereby provide a record of the procedure performed, a record of each diagnosis supporting the procedure performed, and a user defined ranking of each diagnosis supporting the procedure performed to provide a record of the patient encounter".**

As previously discussed, Goltra and Waters are deficient. In particular neither reference discloses "using the user interface to reorder the plurality of diagnosis codes." Goltra discusses an ordering of codes but not reordering diagnosis codes using a user interface. Nor do the reference disclose "documenting the patient encounter by storing each of the at least one procedure codes and storing each of the at least one diagnosis codes linked to each of the at least one procedure codes to provide a record of each set of diagnosis codes collected for each procedure code and a rank order of each set of diagnosis codes." No reference teaches documenting a patient encounter in this way. It is recognized that the Examiner cites to Goltra as disclosing this limitation, but Goltra simply does not. Moreover, Goltra is directed towards intelligent prompting to assist in diagnosing, not for documenting a patient encounter using codes. Thus, it is further submitted that the combination of Goltra and Waters is merely improper hindsight.

The Examiner states that "it would have been obvious to one of ordinary skill in the art to include within Waters' code-driven system and method for optimizing medical diagnosis, procedures and claims the feature of linking the procedure code to the plurality of diagnosis codes, as taught by Dorne, and the user-defined rank ordering of diagnosis codes, as taught by Goltra, since the claimed invention is merely a combination of old elements, and in the combination each element merely would have performed the same function as it did separately, and one of ordinary skill in the art would have recognized the results of the combination were predictable" (Examiner's Answer, p. 29). This statement by the Examiner is in no way enlightening as to the rationale for the Examiner's purported combination of references. Nor is it a correct account of the teachings of the references. For example, Goltra does not teach "user-defined rank ordering of diagnosis codes."

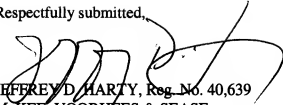
Therefore, it is respectfully submitted that this rejection to claim 105 must be reversed. As claim 108 depends from claim 105, this rejection should also be reversed.

## **V. CONCLUSION**

In view of the foregoing, Appellants respectfully submit that the Examiner's Answers do not remedy the deficiencies noted herein and in Appellants' Appeal Brief. The Examiner's rejections under § 103 remain improper and should be reversed by the Board. It is respectfully submitted that the claims are in condition for allowance and the case should be allowed.



Respectfully submitted,

A handwritten signature in black ink, appearing to read 'Jeffrey D. Hart', is written over the typed name and extends upwards and to the right.

JEFFREY D. HARTY, Reg. No. 40,639

McKEE, VOORHEES & SEASE

Attorneys of Record

CUSTOMER NO. 22885

801 Grand - Suite 3200  
Des Moines, Iowa 50309-2721  
515-288-3667

- JDG/bjh -